



The Road to Michigan Public Safety Broadband

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Michigan's Public Safety Broadband Program

MI Dept. Of Technology, Management & Budget (DTMB)


Center for Shared Solutions (CSS)







FirstNet RFP – What is it?


To establish a Public/Private Partnership for the Public Safety Broadband Network

-  The winning bidder will build and operate the system with 20 MHz of 700 MHz broadband spectrum under a lease agreement.



-  In return, the company can monetize any unused network capacity.

-  Pre-proposal Activity
 - 13 requests for information
 - Several draft RFPs
 - 2 public industry days,
 - 650 questions related to network specifications, and
 - Multiple meetings with interested vendors

-  The Request for Proposal
 - 13 Sections (Section A – Section M)
 - 28 Maps and Tables





FirstNet RFP Notable Points

- Section B of the RFP spells out a **phased-in scale of yearly minimum contractor reimbursement payments to FirstNet** that would take into account a contractor's anticipated deployment and operational ramp-up.

	Timing / Area	IOC - 1 <i>6 Months from Award</i>	IOC - 2 12 Months	IOC - 3 24 Months	IOC - 4 36 Months	IOC - 5 48 Months	FOC 60 Months
G.	Coverage and Capacity Solutions (State and Territory Task Orders)		Achievement of 20% of Contractor's proposed Band 14 coverage in non-rural areas.	Achievement of 60% of Contractor's proposed Band 14 coverage in non-rural areas.	Achievement of 80% of Contractor's proposed Band 14 coverage in non-rural areas.	Achievement of 95% of Contractor's proposed Band 14 coverage in non-rural areas.	Achievement of 100% of Contractor's proposed Band 14 coverage in non-rural areas.
H.	Substantial Rural Milestones (State and Territory Task Orders)		Achievement of 20% of Contractor's proposed Band 14 coverage in rural areas.	Achievement of 60% of Contractor's proposed Band 14 coverage in rural areas.	Achievement of 80% of Contractor's proposed Band 14 coverage in rural areas.	Achievement of 95% of Contractor's proposed Band 14 coverage in rural areas.	Achievement of 100% of Contractor's proposed Band 14 coverage in rural areas.

- The RFP also has a section on **cybersecurity** that incorporates input from industry and public safety officials
- Although the RFP does not specify what kinds of bidders it's looking for, **telecommunications carriers are the obvious choice**. Those carriers have been largely mum on their bidding plans for the project.





FirstNet RFP Evaluation Factors



Business Management Factor

- Leadership and Program Management
- Public Safety Customer Acquisition
- Customer Care and Lifecycle Sustainment
- Financial Standing
- Delivery Mechanism for State Plans



Products & Architecture Factor

- Service (public safety features)
- Applications
- Device Ecosystem
- Architecture and Infrastructure
- Operations
- Security
- Test Strategy



Risk

- Proposal Risk
- Performance Risk



Coverage & Capacity Factor

- Band 14 & Non-Band 14 Coverage and Capacity
- Radio Access Networks
- IOC/FOC Milestones form Coverage and Capacity
- Ability to demonstrate Rural Partnerships



Value Proposition Assessment

- Meets FirstNet Sustainability Objectives
- Use of FirstNet's \$6,500,000,000
- Demonstrated Synergies & Added Value
- Unbalanced/Unreasonable Value Determination



Past Performance Factor

- Successful project completions history (e.g., similar scope, within schedule, within budget, quality of deliverables)
- Quality of cooperation and responsiveness
- Performance measure implementation and improvement



FirstNet RFP 2016 Critical Dates

JAN 13 - RFP Released
FEB 12 - Questions Due
MAR 10 - Pre-proposal Conference
MAR 17 - Voluntary Capability Statements Due
APR 19 - Proposals Due
NOV ? - Contract Award





2015

2016



* Events and dates subject to change



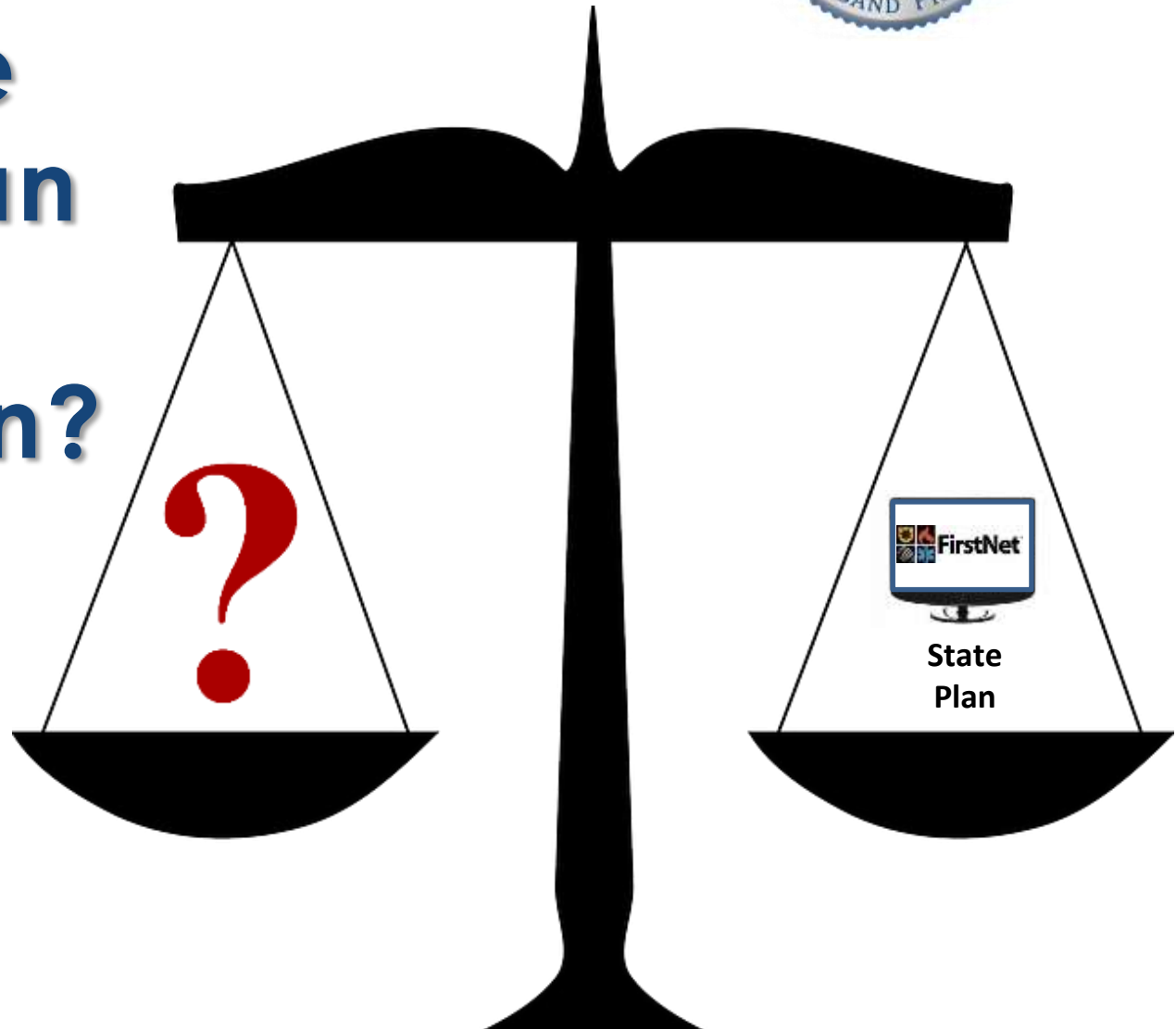


State and Local Implementation Grant Program (SLIGP)



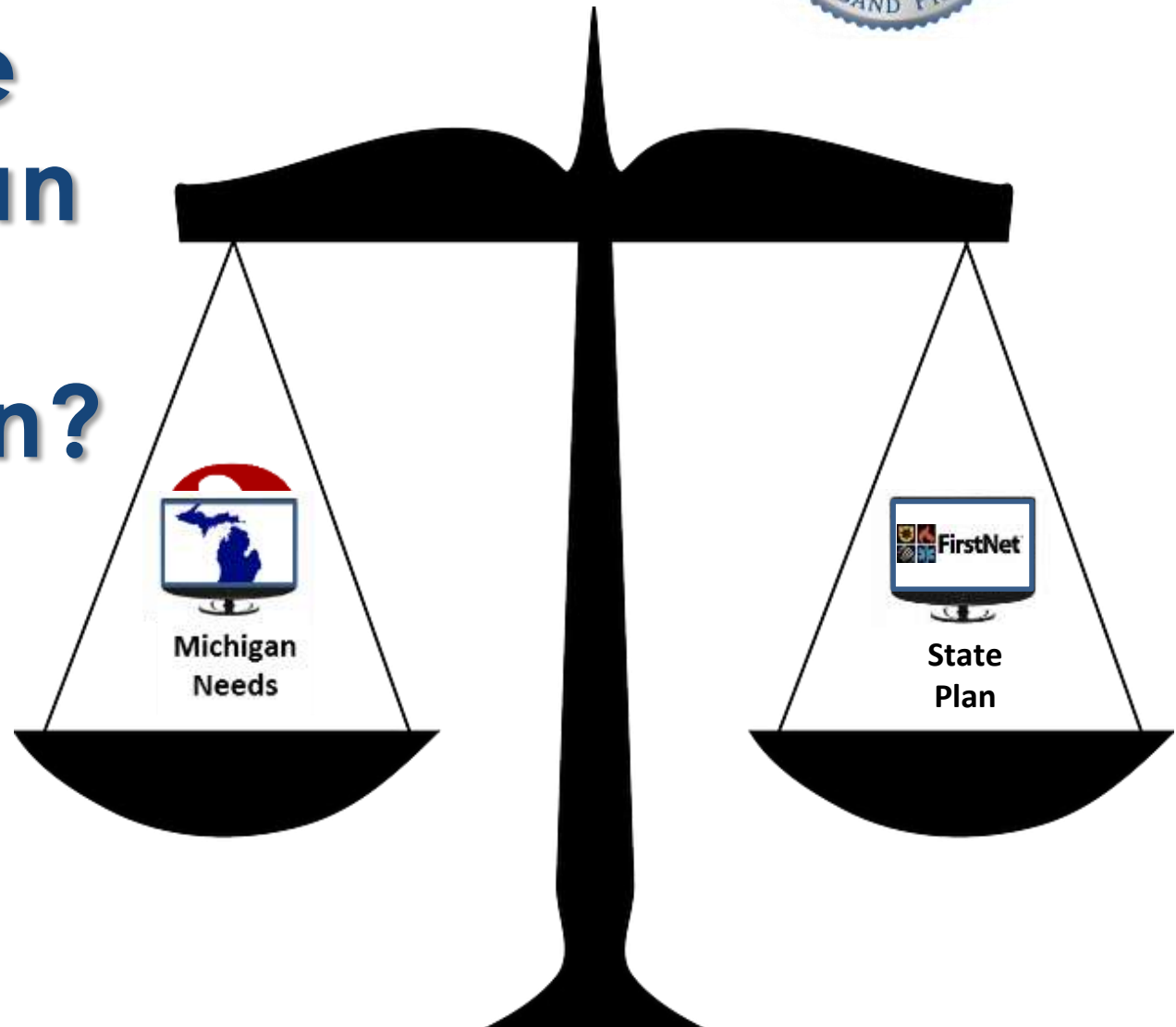


Is it the
right plan
for
Michigan?





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What does Michigan want from FirstNet?

- PSLTE Phased Approach that will have emphasis on underserved areas
- Baseline coverage that is equal to or better than MPSCS coverage
- Integration into the communications network to enhance interoperability
- Create a converged network of PSLTE and NG911 for public safety service delivery.
- Provide a PSLTE Solution that is Cost Effective



FirstNet RFP – Objectives (16)

- From the Government's perspective, the **objectives are Nationwide** in scope.
- **Objectives-based** rather than a traditional **Requirements-driven** Model.



Building,
Deployment,
Operation &
Maintenance
of the NPSBN



Financial
Sustainability



First Responder
User Adoption



Device
Ecosystem



Applications
Ecosystem



Accelerated
Speed to
Market



User Service
Availability



Service
Capacity



Cyber Security



Priority
Services



Integration
Of Opt-out
State RANs



Integration of
Existing
Commercial/
Federal/
State/Tribal/Local
Infrastructure To
Support NPSBN
Services



Life-cycle
Innovation



Program and
Business
Management



Customer
Care and
Marketing



Facilitation of
FirstNet's
Compliance
With The Act
& Other Laws



Section J19 - State Plan Template – 7 Parts

1. Purpose
2. FirstNet Overview and Mission
3. State Consultation
4. State Radio Access Network Plan
5. Public Safety Grade
6. Network Operator / User Training Requirements
7. State Decision Process / Requirements / Timeline
 - Appendix A – FirstNet Nationwide Design
 - Appendix B – Device Strategy, Roadmap, and Support
 - Appendix C – Application Strategy and Operations
 - Appendix D – Deployable Assets
 - Appendix F - Financials





Section J19 - State Plan Template: Evaluation

RFP Item	RFP Note	State Input?	Assignment	Urgency (Start now; No hurry; Delayed Start)
1 Plan Purpose				Start now
	Text for this section will be provided by the First Responder Network Authority (FirstNet).	MiPSB	MiPSB core team	
2 Overview and Mission				Start now
	Text for this section will be provided by FirstNet.	MiPSB	MiPSB core team	
3 State Consultation				No hurry
	Text for this section will be provided by FirstNet.	MiPSB	MiPSB core team	
3.1 State Governing Body				Start now
	Text for this section will be provided by FirstNet.	MiPSB	MiPSB core team	
3.2 Consultation Process				No hurry
	Text for this section will be provided by FirstNet.	MiPSB	MiPSB core team	
3.3 Outreach and Education Support				Start now
	Text for this section will be provided by FirstNet.	MiPSB	MiPSB core team	
3.4 State Plan Inputs and Outcomes				???
	Text for this section will be provided by FirstNet.	MiPSB	MiPSB core team	
3.4.1 Minimum Criteria for a State Plan				???
	Text for this section will be provided by FirstNet.	MiPSB	MiPSB core team	
3.4.2 Coverage Objectives				Start now
	Text for this section will be provided by FirstNet.	MiPSB	Technical Advisory Team	
3.4.3 User Profiles/Statistics				Start now
	Text for this section will be provided by FirstNet.	MiPSB	Technical Advisory Team	
3.4.4 Capacity Planning				Start now
	Text for this section will be provided by FirstNet.	MiPSB	Technical Advisory Team	
3.4.5 Current Mobile Data Usage				Start now
	Text for this section will be provided by FirstNet.	MiPSB	Technical Advisory Team	
3.5 State Decision Process				Start now
	Text for this section will be provided by FirstNet.	MiPSB	MiPSB core team	
3.5.1 Summary/Timeline of Actions Required by the State				Start now
	Text for this section will be provided by FirstNet.	MiPSB	MiPSB core team	
3.5.2 Changes to State Plan Following Decision to Proceed with FirstNet-Deployed Radio Access Network				???
	Text for this section will be provided by FirstNet.	???	???	
4 State Radio Access Network Plan				Delayed start
	Text for this section will be provided by FirstNet.	MiPSB	Technical Advisory Team	



Section J19 - State Plan Template: Evaluation

RFP Item	RFP Note	State Input?	Assignment	Urgency (Start now; No hurry; Delayed Start)
4.2.1 Coverage Objectives and Requirements				
	Text for this section will be provided by FirstNet.	MiPSB		
4.2.2 Tower Site Locations				
	Provide maps and tables, in accordance with Table 1 Map Deliverables for Coverage and Capacity and Table 2 Network Statistics Deliverables, showing the proposed tower site locations and configurations. If available, the	FirstNet		
4.2.3 Link Budget Specifications				
	Provide the detailed link budget information utilized in the development of the provided coverage maps. The link budget should be provided for all morphologies (dense urban, urban, suburban, and rural) and for each of the 56	FirstNet		
	• Assumptions, margins, and gains accounted for in	FirstNet		
	• Impacts due to various device types	FirstNet		
	• Maximum allowable path loss, design thresholds, and	FirstNet		
4.2.4 Equipment Performance Specifications				
	Describe the proposed Radio Access Network (RAN) vendor portfolio, scope of equipment, and feature interoperability to be included with the NPSBN. Provide	FirstNet		
	• A diagram and description of the Long Term Evolution (LTE) base station and sectors, including the antenna system and backhaul components. Identify areas of resource aggregation or redundancy. Describe	FirstNet		
	• A description of variants of Enhanced Node Base station (eNodeB) platforms available in the current architecture,	FirstNet		
	• Hardware or software techniques utilized to maximize coverage and capacity (e.g., MIMO, carrier aggregation)	FirstNet		
	• A dimensioning guide for all capacity-dependent hardware and software in the eNodeB. Within the guide, describe the traffic load used in the dimensioning	FirstNet		

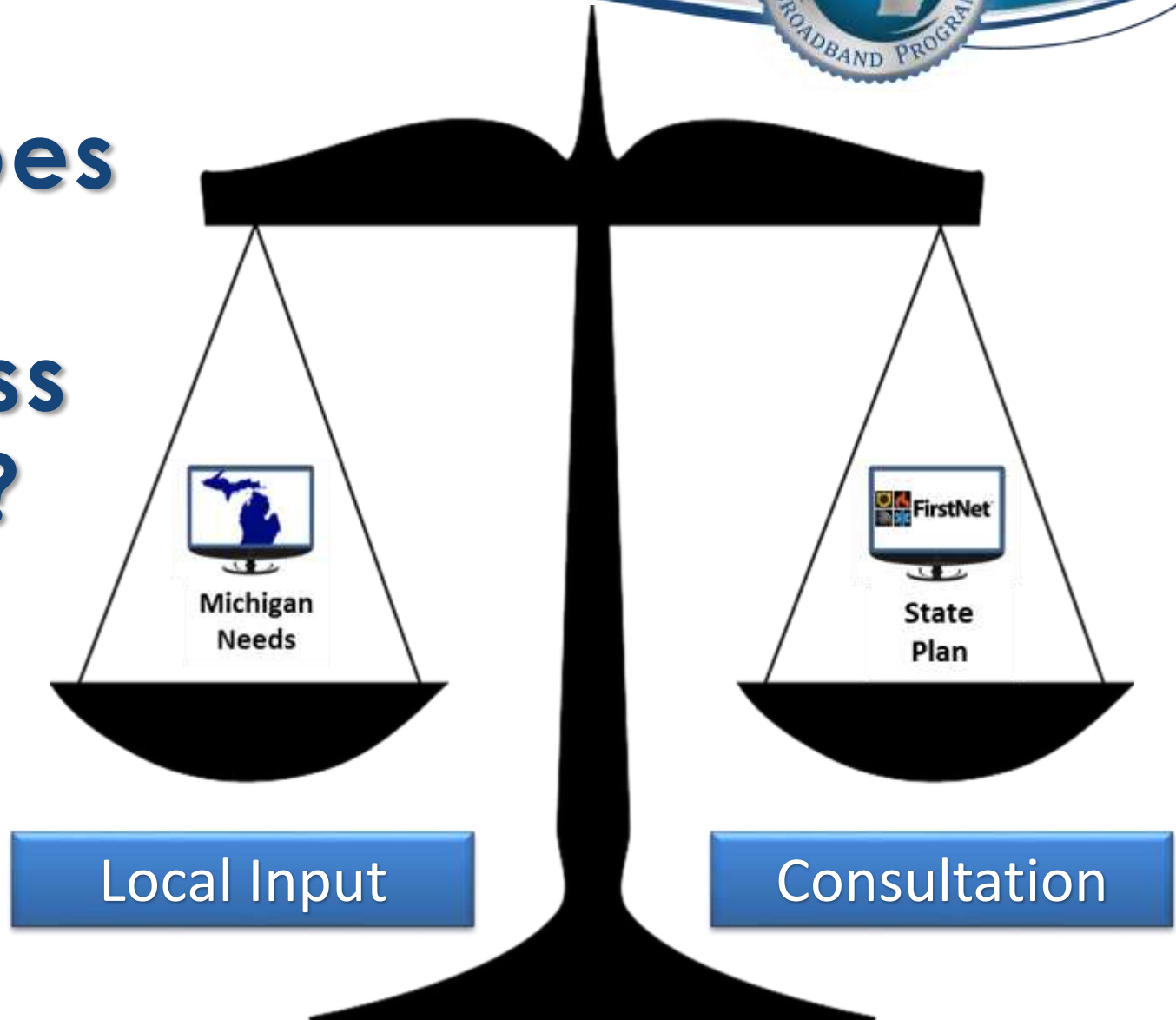


Section J19 - State Plan Template: Evaluation

RFP Item	RFP Note	State Input?	Assignment	Urgency (Start now; No hurry; Delayed Start)
4.3.2 Coverage Extension Assets Owned by Public Safety	Provide a comprehensive list of coverage extension assets, such as a Vehicular Network Systems (VNSs) that will be available to Public Safety Entities (PSEs) for	MIPSB		
4.3.3 Non-Persistent Cellular Service and Devices	Provide a comprehensive list of non-persistent cellular services, and associated devices, that will be available to a PSE for purchase via the customer-facing Web-based portal. This list may include but is not limited to a VNS with satellite fallback connectivity, a VNS with local eNodeB, Evolved Packet Core (EPC) and applications	???		
4.4 Deployment Phases and Timelines	Provide a schedule noting the timeline for achieving the IOC/FOC milestones for coverage and capacity. Provide a schedule that aligns with the IOC/FOC milestones and describes the planned deployment of coverage by state/territory. Describe roaming networks that may be	FirstNet		
4.5 Rural Milestones	Text for this section will be provided by FirstNet.	MIPSB		
4.6 Network Upgrade and Expansion	<p>The Offeror shall describe the strategy to support necessary network expansion. The strategy shall address coverage, quality, and capacity improvements to the NPSBN and include methodologies and thresholds used</p> <ul style="list-style-type: none"> <input type="checkbox"/> Coverage – Extension of coverage to serve new areas (e.g., increase of service area footprint) <input type="checkbox"/> Capacity – Additional capabilities to address network congestion (e.g., cell density) <input type="checkbox"/> Quality – Improvement of existing capabilities to meet local performance objectives (e.g., strengthening indoor <p>Provide a framework to facilitate collaboration with local, state, tribal, and federal governments to improve the NPSBN service area and capabilities. Within the framework, address shared or independent efforts to align the NPSBN demand and services. Detail the proposed</p>	MIPSB		



How does
the
process
work?

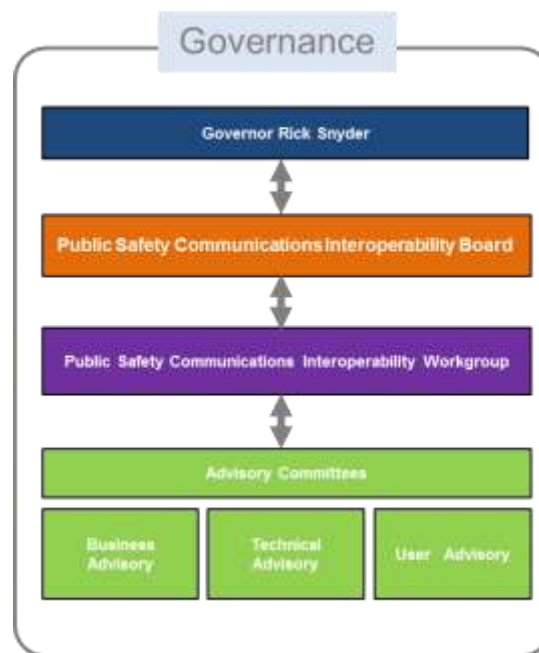




Michigan Local Input



User Surveys



Advisory Groups



Regional Meetings



What's your role?



User Surveys



Advisory Groups



Regional Meetings



Michigan's Next Steps

- ☐ Regional Engagement Workshops – Region 5 Pilot March 24th, 2016
- ☐ Regional Engagement Workshops – All others Q1/Q2 2016
- ☐ Review and validate coverage and priority phasing – 2016
- ☐ Participate in Consultation Task Teams on State and National level
 - ☐ Local Control
 - ☐ Priority and Preemption
 - ☐ Others as defined
- ☐ Additional FirstNet consultation meetings

*We need you to be an Advocate for your Discipline,
...as well as an Advocate for your Community!!!*



Questions



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